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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,266	05/24/2001	Yoshihiro Izumi	925-197	9027

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EXAMINER

SCHECHTER, ANDREW M

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 10/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,266

Applicant(s)

IZUMI ET AL.

Examiner

Andrew Schechter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-18 is/are pending in the application.
- 4a) Of the above claim(s) 13-18 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 and 7-10 is/are allowed.
- 6) ☒ Claim(s) 11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species I (i.e., flat panel display device) in Paper No. 6 is acknowledged. However, the generic claim 1 is now allowable, so claim 8 (of Species II) has been rejoined and is also allowable.
2. Newly submitted claims 13-18 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Inventions I (claims 1-5 and 7-12, directed to a device) and II (claims 13-18, directed to a method of making a device) are related as product made and process of making. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, both can be shown: the device of Invention I can be formed without the "performing exposure from a back surface side...in a self-alignment fashion", while the method of Invention II can be used to form a device without the coloring of claims 1-5, 9, and 10, and without being a transmissive device as in claims 11 and 12.

Because these inventions are distinct for the reasons given above and the search required for Invention II (methods subclass 349/187, etc.) is not required for Invention I, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 13-18 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Response to Arguments

3. Applicant's arguments filed 21 July 2003 have been fully considered but they are not persuasive.

The applicant argues [p. 8-9] that the previous rejection of claim 6, whose additional limitation was in effect amended to claim 1, is improper since *Nakai* does not disclose coloring the pixel electrode in the embodiment in which the pixel electrode is photosensitive, and its generic teaching of coloration [col. 14, lines 29-30] is not directed toward pixel electrodes. The examiner accepts this argument, and therefore withdraws the rejection of the previous claim 6, and the present claim 1, in view of *Nakai*. Claim 1, and claim 9 which contains an analogous limitation, are therefore allowed.

The applicant argues that since *Nakai* is a reflective-type LCD, the newly presented claim 11 should be allowable since it recites a transmissive LCD and the absence of a reflector. The examiner agrees that, since the photosensitive conductive material in *Nakai* is intimately connected to the device being reflective (helping to direct the incident and reflecting light rays), it would not be obvious to one of ordinary skill in the art to use the photosensitive conductive materials of *Nakai* in a transmissive device,

or to simply use *Nakai*'s device in a transmissive mode. The examiner therefore accepts this argument, and does not cite *Nakai* against claim 11. However, the newly presented claim 11 is rejected below in view of another reference.

Claim Objections

4. Claim 12 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 11 already recites that the photosensitive conductive material of the pixel electrode has negative type photosensitivity.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Yoritomi et al.*, Japanese Patent Document No. 04-081820 in view of *Imura*, U.S. Patent No. 6,036,329.

Yoritomi discloses [see abstract] a liquid crystal display including a liquid crystal cell which comprises a substrate [1] supporting a plurality of address lines [2] in

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communication with a switching element [TFT, 4-6, etc.], a transparent pixel electrode [7, see abstract] in electrical communication with the switching element, wherein the transparent pixel electrode is for applying voltage across a liquid crystal layer, wherein the transparent pixel electrode comprises a negative type photosensitive conductive material and is photo-patternable due to its photosensitive nature [see abstract, the "unexposed parts are developed away", hence negative type], and wherein no reflector is provided in the cell under the pixel electrode.

Yoritomi does not explicitly disclose [at least in the abstract] that the device is transmissive type. It lacks a reflector, and the pixel electrodes are made of transparent conductive films, which strongly suggest that it is transmissive type, but there is no explicit statement that it is so.

It would have been obvious to one of ordinary skill in the art to make *Yoritomi's* device a transmissive type LCD, motivated by *limura's* teaching that "liquid crystal displays of transmissive type instead of reflective type are utilized ... so that it can be clearly observed by an observer in a dark place as well as a bright place" [col. 1, lines 30-35]. Claim 11 is therefore unpatentable.

The photosensitive conductive material of the pixel electrode has negative type photosensitivity, so claim 12 is also unpatentable.

Allowable Subject Matter

7. Claims 1-5 and 7-10 are allowed.

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8. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not disclose the active matrix device recited by claim 1, in particular having pixel electrodes comprised of a photosensitive conductive material including at least one coloring agent so that at least some of the pixel electrodes function as both pixel electrodes and color filters. Claims 1 and 9 are therefore allowed, as are dependent claims 2-5, 7, 8, and 10.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

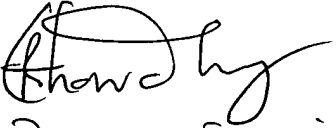
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Schechter whose telephone number is (703) 306-5801. The examiner can normally be reached on Monday - Friday, 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on (703) 305-3492. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


Andrew Schechter
15 October 2003


Primary Examiner